 GPS STATION OBSERVATION LOG (01-Sep-2000)	Station Designation: (circle applicable: FBN / CBN / PAC / SAC / BM)		Station PID, if available:		Date (UTC):						
	General Location:		Airport ID, if any:		Station 4-Character ID:						
Project Name:		Project Number: GPS-		Station Serial # (SSN):		Session ID:(A,B,C etc)					
NAD83 Latitude ° ' "		NAD83 Longitude ° ' "		NAD83 Ellipsoidal Height meters NAVD88 Orthometric Ht. meters GEOID99 Geoid Height meters		Agency Full Name: Operator Full Name: Phone #: () e-mail address:					
Observation Session Times (UTC): Epoch Sched. Start _____ Stop _____ Interval= _____ Seconds Actual Start _____ Stop _____ Elevation Mask = _____ Degrees											
GPS Receiver: Manufacturer & Model: P/N: S/N: Firmware Version: " CamCorder Battery, " 12V DC, " 110V AC, " Other		GPS Antenna: Manufacturer & Model: P/N: S/N: Cable Length, meters: Vehicle is Parked _____ meters _____(direction) from antenna.		Antenna plumb before session? (Y / N) Circle Antenna plumb after session? (Y / N) Yes or No Antenna oriented to the North? (Y / N) -If no, Weather observed at antenna ht. (Y / N) explain Antenna ground plane used? (Y / N) " <hr/> Antenna radome used? (Y / N) If yes, Eccentric occupation (>0.5 mm)? (Y / N) describe. Any obstructions above 10°? (Y / N) Use Radio interferencesource nearby? (Y / N) Vis. form							
Tripod or Ant. Mount: Check one: " Fixed-Height Tripod, " Slip-Leg Tripod, " Fixed Mount Manufacturer & Model: P/N: S/N: Last Calibration date:		** ANTENNA HEIGHT ** (see back of form for measurement illustration)		Before Session Begins: measure and record both Meters AND Feet		After Session Ends: measure and record both Meters AND Feet					
		A= Datum point to Top of Tripod (Tripod Height)									
		B= Additional offset to ARP if any (Tribrach/Spacer)									
Tribrach: Check one: " None, " Wild GDF 22, " Topcon, " Other (describe) Last Calibration date:		H= Antenna Height = A + B = Datum Point to Antenna Reference Point (ARP)									
		Note: Meters = Feet X (0.3048) Please note &/or sketch ANY unusual conditions. Height Entered Into Receiver = _____ meters. Be Very Explicit as to where and how Measured!									
Barometer: Manufacturer & Model: P/N: S/N: Last Calibration or check Date:		Weather DATA	Time (UTC)	Dry-Bulb Temp Fahrenheit Celsius		WetBulb Temp Fahrenheit Celsius		Rel. % Humidity	Atm. Pressure inches Hg millibar		Weather Codes *
		Before									
		Middle									
Psychrometer: Manufacturer & Model: P/N:		After									
		Average of Readings									* See back of form for codes
Remarks, Comments on Problems, Sketches, Pencil Rubbing, etc:											
Note: Entries are Required in <u>all</u> Unshaded areas.											
Data File Name(s): (Standard NGS Format = aaaaddds.xxx) where aaaa=4-Character ID, ddd=Day of Year, s=Session ID, xxx=file dependant extension						Updated Station Description: " Attached " Submitted earlier Visibility Obstruction Form: " Attached " Submitted earlier Photographs of Station: " Attached " Submitted earlier Pencil Rubbing of Mark: " Attached			LOG CHECKED BY:		

ILLUSTRATION FOR ANTENNA HEIGHT MEASUREMENTS:

I. Instructions for Fixed-Height Tripods:

Measure & record the fixed-height tripod length (A) and other offsets, if any, between the tripod and the Antenna Reference Point (ARP) (B)

$$\text{Antenna Height} = H = A + B$$

II. Instructions for Slip-Leg Tripods:

1. Measure the Slant Height (S)

Measure the slope distance from the mark to at least three notches on the Bottom of Ground Plane (BGP) using two independent rulers (e.g., metric and Imperial). Record measurements in the table below, and compute the average.

Measure S	Notch #_	Notch #_	Notch #_	Average
Before, cm				
Before, inch				
After, cm				
After, inch				
Note: cm= inch x (2.54)		Overall average, cm		

$$S = \text{_____ cm}$$

2. Record the Antenna Radius (R) and the Antenna Constant (C)

The antenna radius (R) is the horizontal distance from the center of the antenna to the measurement notch. The antenna constant (C) is the vertical distance from the ARP to the BGP. Consult your antenna users manual for exact measurements.

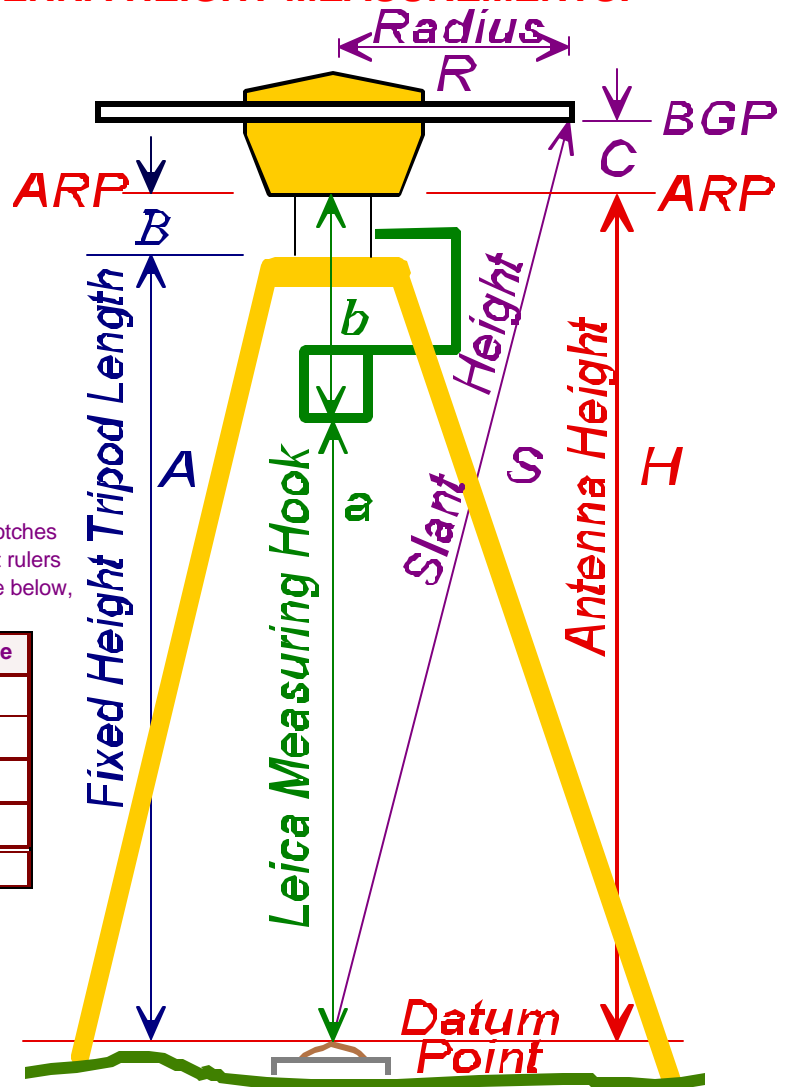
$$R = \text{_____ cm}$$

$$C = \text{_____ cm}$$

3. Compute Antenna Height (H)

Use the following Pythagorean equation:

$$\text{Antenna Height} = H = ((\sqrt{S^2 - R^2}) - C)$$



III. Instructions for using the Leica Brand Measuring Hook:

Follow the Leica operating instructions, being sure to reduce the height to the Antenna Reference Point (ARP), NOT the L1 Phase Center.

$$\text{Antenna Height} = H = a + b$$

Table of Weather Codes -- for entry into Weather Data Table on front of form:

CODE	PROBLEM	VISIBILITY	TEMPERATURE	CLOUD COVER	WIND
0	NO PROBLEMS encountered	GOOD More than 15 miles	NORMAL 32° F to 80°F	CLEAR Below 20%	CALM Under 5mph (8km/h)
1	PROBLEMS encountered	FAIR 7 to 15 miles	HOT Over 80°F (27 C)	CLOUDY 20% to 70%	MODERATE 5 to 15 mph
2	-- NOT USED --	POOR Less than 7 miles	COLD Below 32° F (0 C)	OVERCAST Over 70%	STRONG over15mph (24km/h)
Examples: Code 00000 = 0 - No problems, 0 - good visibility, 0 - normal temperature, 0 - clear sky, 0 - calm wind					
Code 12121 = 1 - Problems, 2 - poor visibility, 1 - hot temperature, 2 - overcast, 1 - moderate wind					